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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/830,063

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Rached Ksontini

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03/26/2008

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EXAMINER

HENEGHAN, MATTHEW E

ART UNIT

PAPER NUMBER

2139

MAIL DATE

DELIVERY MODE

03/26/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/830,063	Applicant(s) KSONTINI ET AL.	
	Examiner Matthew Heneghan	Art Unit 2139	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 January 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. In response to the previous office action, Applicant has cancelled claims 1-15 and added claims 16-35. Claims 16-35 have been examined.

Drawings

2. The drawings were received on 3 January 2008. These drawings are acceptable.

Claim Objections

3. Claims 25 and 26 are objected to because of the following informalities: Each claim is recited as being dependent on "any of the claims," but only one claim is listed. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 16, 18, 22, 25, 28, 29, and 32-35 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,049,878 to Caronni et al.

As per claims 16 and 28, Caronni discloses a process for replacing keys (the content keys) (see column 7, lines 33-35) with newly generated keys when a group member in an encrypted multicast has departed (see column 8, lines 29-55). One or more KEK's (the temporary key) are used for key distribution. A plurality of copies of the new content key information is distributed under group KEK's, as well as under the individual node's KEK for the closest neighbor of the revoked node (see column 9, lines 1-24). Decryptions are performed using the received KEK's and then the new content key is derived (see column 9, lines 37-41).

As per claims 18, 22, 29, and 32, the new key is derived from a one-way algorithm based upon the received key version number (a variable element) (see also column 6, lines 51-65).

As per claim 25, the one-way algorithm may be an encryption algorithm such as MD5 (see column 6, lines 64-65).

As per claims 33-35, a hierarchical group key system is used to allow for the largest number of nodes to be addressed at once, with a key level being indicated (see column 9, lines 1-36).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,049,878 to Caronni et al.

Regarding claim 17, Caronni only discloses the distribution of version numbers from which the new content key may be derived, rather than distributing the key itself; however, one skilled in the art would recognize that it would be less cumbersome to simply send the new key. Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Caronni by simply sending the new key instead of a version number.

Regarding claim 19, the new key may implicitly be built from itself.

5. Claims 20, 21, 23, 24, 26, 27, 30, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,049,878 to Caronni et al. as applied to claim 16 et al. above, and further in view of U.S. Patent No. 6,035,038 to Campinos et al.

Wajs does not disclose the inclusion of access conditions as part of the process that yields the encryption key.

Campinos, which is analogous art, discloses the inclusion of access restrictions in an ECM as well as a hash function used in the key retrieval process (see column 5, lines 43-64).

Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Caronni by including access restrictions in an ECM as well as a hash function used in the key retrieval process, as per Campinos.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew E. Heneghan, whose telephone number is (571) 272-3834. The examiner can normally be reached on Monday-Friday from 8:30 AM - 4:30 PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid, can be reached at (571) 272-4063.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
P.O. Box 1450
Alexandria, VA 22313-1450

Or faxed to:

(571) 273-3800

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Matthew Heneghan/

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Primary Patent Examiner, USPTO AU 2139

March 28, 2008